


Engineer: Jack Curtis	Date: 6/25/02	 JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 6/25/02				
Checked: CTS	Date: 6/25/02	Title: ACU RADIO APPLICATION NOTES			
Approved: Revised	Date: 3/19/04	Size: A	Dwg. #: 5961-271168-APP	Rev: A	Sheet: 1 of 2

APPLIES TO: Ericsson-GE Orion Mobile (Dash-mount)
Ericsson-GE Orion Mobile (Trunk-mount)

RADIO MODIFICATIONS: None required

RADIO PROGRAMMING:

1. Mobile radios should normally be programmed for low transmit power.
2. Auxiliary Input 2 must be programmed as PTT. To program, first go to OPTIONS, then External I/O options. Go to Keycode and select Auxiliary Input 2. Scroll down and select EXPTT.

RADIO CONTROLS:

Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio. Should be about in the mid-range (12 o'clock) position.

CABLING:

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

Dash-Mount

ACU-1000 Interface Cable	JPS P/N 5961-291171	(5961-271171 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281171	(5961-271171 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271171	
RF Connector Type	TNC	

Trunk-Mount

ACU-1000 Interface Cable	JPS P/N 5961-291168	(5961-271168 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-271168	(5961-271168 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271168	
RF Connector Type	TNC	

DSP PROGRAMMING:

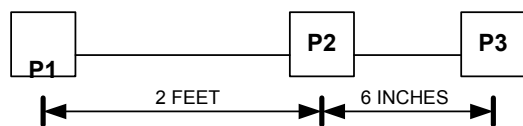
RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(*Indicates Default Value)

NOTES:

The ORION radio is furnished with an accessory cable which not only supplies auxiliary inputs and outputs, but is also used for normal functions such as Speaker, and/or DC Power. Therefore, the interface cable is designed to sandwich between the radio accessory connector and the ORION accessory cable, although it may be used to operate the ACU-1000 without attaching the ORION accessory cable.

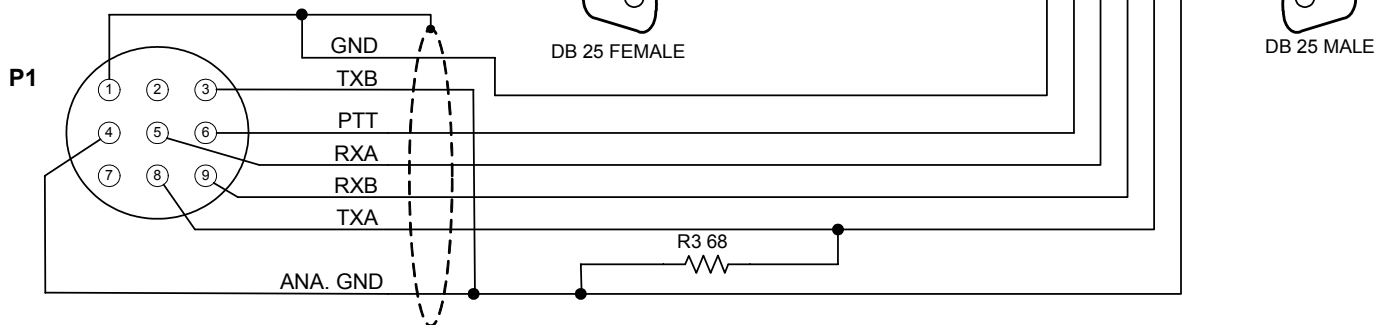
PURCHASED PART



COMPONENT PCB
(JPS P/N 5961-271000)
R3 JPS P/N 1820-680000
JU1
JU2
JU4
JU5

USE MOLDED CABLE
(JPS P/N 5961-261003-00)

CPC FEMALE
REAR VIEW OF CONNECTOR



NOTES: 1. USE MOLDED CABLE JPS P/N 5961-261003-00.
2. SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.
3. INSTALL JACK SCREWS ON P3.

USED WITH:
ERICSSON-GE ORION MOBILE (TRUNK MOUNT ONLY)

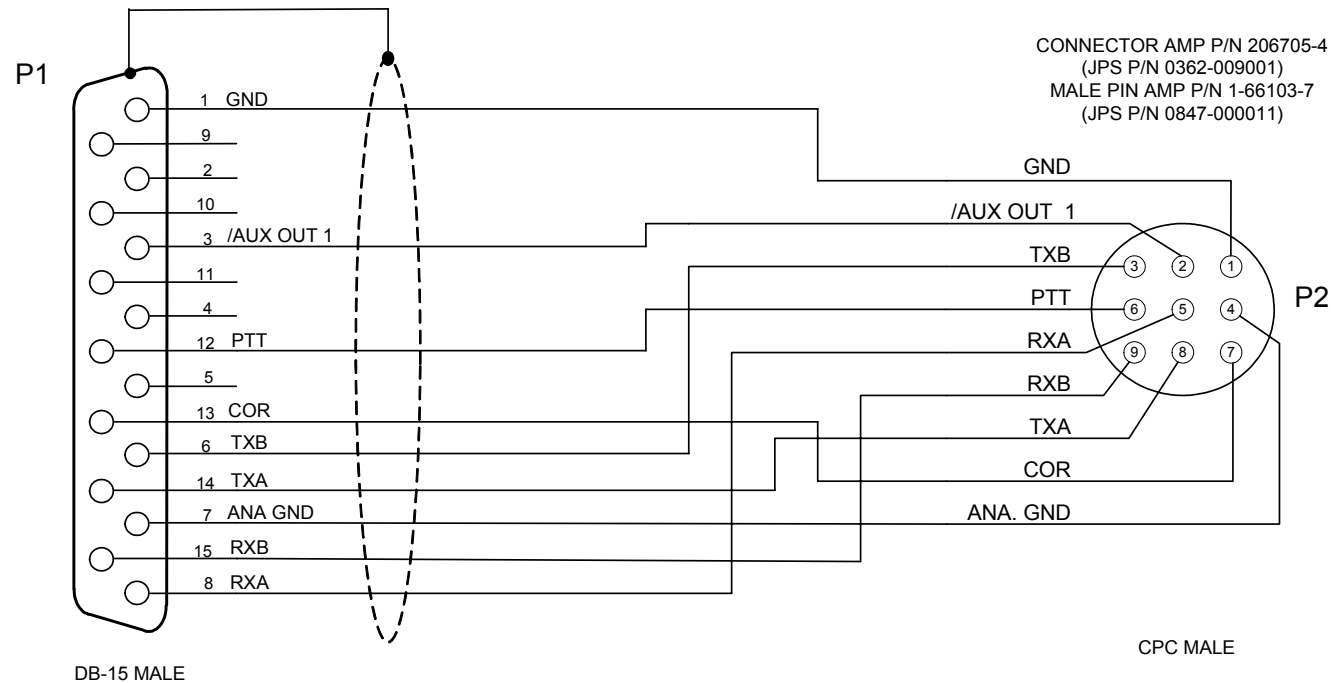
Rev	ECO	Date
A		

P2
TO RADIO
ACCESSORY
CONNECTOR

Designed By: JAC	Raytheon JPS Communications		
Drawn By: RBP	Title CABLE, CPC TO ERICSSON-GE ORION (TRUNK-MOUNT)		
Checked By: CTS	Size A	Document Number 5961-271168	Rev A
	Issued Date MARCH 19, 2004	Sheet <u>1</u> of <u>1</u>	

PURCHASED PART

Rev	ECO	Date
A		



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

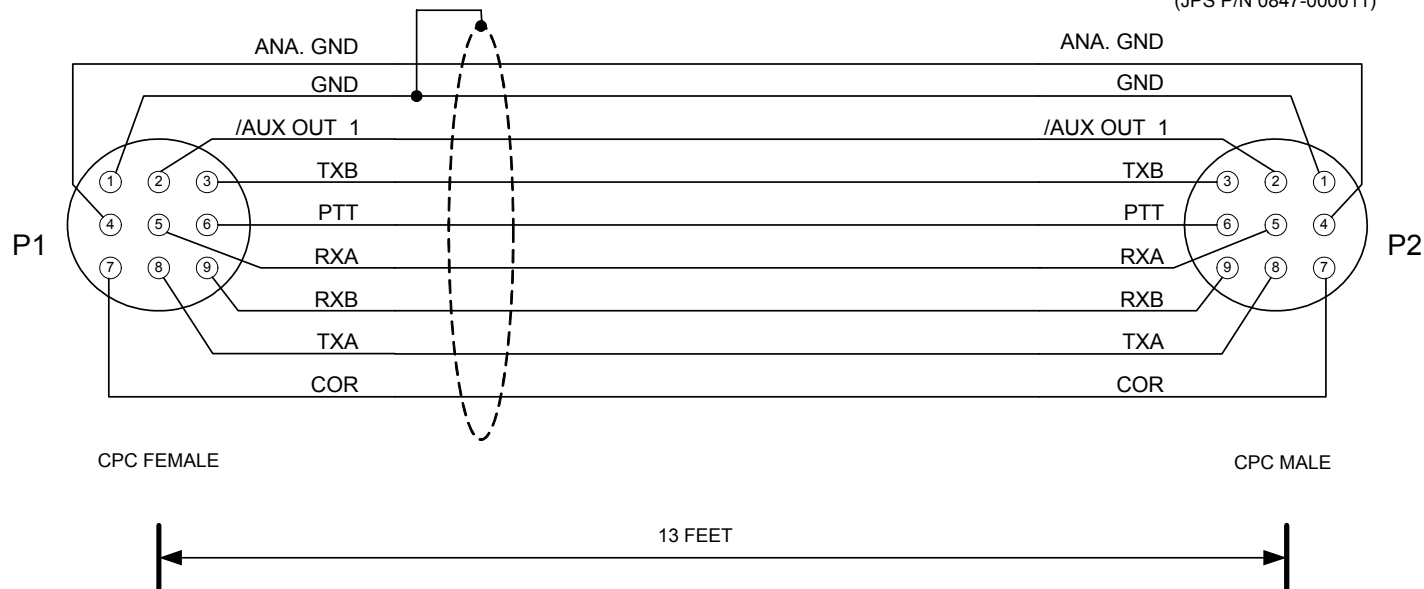
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

PURCHASED PART

CONNECTOR AMP P/N 206708-1
(JPS P/N 0362-005003)
FEMALE PIN AMP P/N 1-66105-8
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4
(JPS P/N 0362-009001)
MALE PIN AMP P/N 1-66103-7
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-281013-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	